SIMTRUM

1550nm CW Single Mode Fiber Laser

2024 V1

For customized projects please Contact us:

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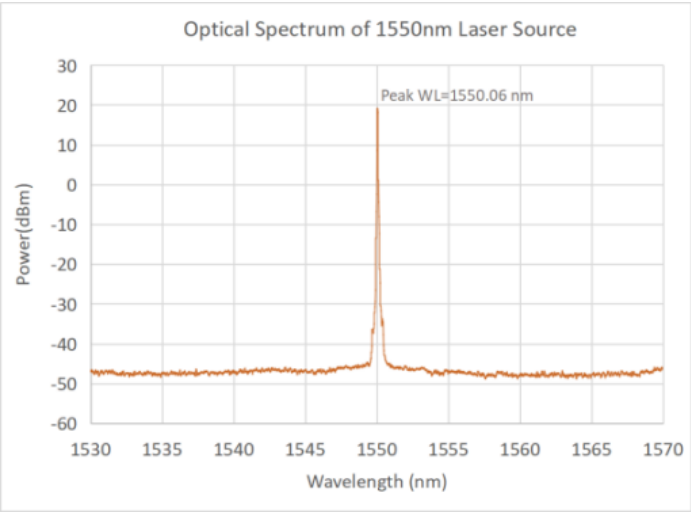
1550nm CW Single Mode Fiber Laser (10-500mW)

SIMTRUM's STFL series 1550nm CW Single Mode Fiber Laser features a high-stability semiconductor chip and offers an output power range of 10-500mW. Designed with precision, the laser incorporates advanced drive and temperature control circuits for safe and reliable operation. Available in both desktop and modular formats, it is ideally suited for a variety of optical applications.



Features

- DFB cavity laser
- Power and spectral stability
- Output power is continuously adjustable

Application

- Fiber optic sensing
- Optical experiments
- Optical fiber communication

Specifications

Optical Parameters	Unit	Typical Value		Remarks
Wavelength	nm	1550		1535 ~ 1565nm customizable
Wavelength Accuracy	nm	±0.5		
Laser Operation Mode	-	CW		Continuous light
Spectral Linewidth	nm	≤ 3		
Side Mode Suppression Ratio	dB	> 50		
Output Power	mW	10/20/50/100/200/400/500		
Accuracy Working	-	10~100%		
Instability(15min.in)	dB	≤ ±0.02		Equivalent to ≤±0.5%
Instability(8 hr)	dB	≤ ±0.05		Equivalent to ≤±1.2%
Polarization State	-	Random	Linear polarization	
Optical Fiber	-	SMF-28	PM1550	
Fiber connector	-	FC/APC	FC/APC (slow axis alignment)	

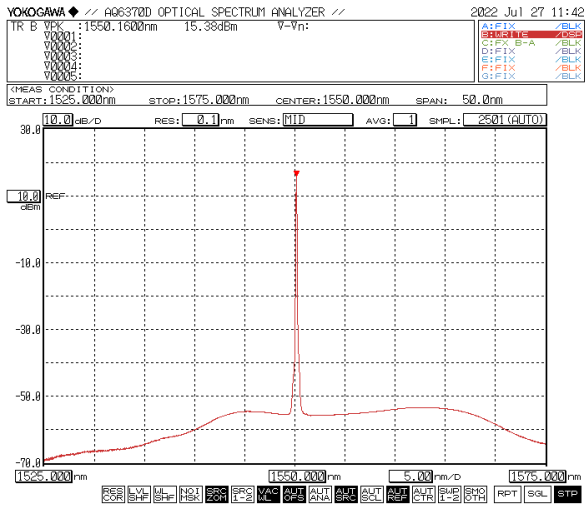
Specifications

General Parameters	Desktop	Module
Control Function	Keystroke / RS232 serial Communication	RS232 serial Communication
Remote control Port	DB9 Female	DB9 Female
Power Supply	AC100~240V, <30W	DC5V, <15W
Dimensions	260(W)×280(D)×120(H)mm	125(W)×150(D)×20(H)mm
Operation Temperature	-5~+35°C	
Operation Humidity	0~70%	

Ordering Information/Product Code				
Series	**Wavelength (nm)**	**Output Power (mW)**	**Fiber**	**Packaging**
STFL	1550	10/20/50/100/200/400/500	SM = SMF-28	M - Module
			PM = PM1550	B - Desktop

1550nm CW Single Mode Fiber Laser (1- 20W)

SIMTRUM's STFL series 1550nm CW Single Mode Fiber Laser integrates a DFB seed laser with a high-power gain optical module to deliver high-power, single-wavelength laser transmission. This laser provides an output range of 1-20W and features expertly designed drive and temperature control circuits for safe, stable operation. Its stable spectrum and power output make it ideal for long-term use in labs. The desktop design is user-friendly, with a simple, intuitive control interface, perfect for scientific research applications.



Features

- Various Power 1~20W
- Single-mode fiber output
- Power and spectral stability

Application

- Fiber optic sensing
- Optical experiments
- Optical fiber communication

Specifications

Optical Parameters	Unit	Typical Value		Remarks
Wavelength	nm	1550		1535 ~ 1565nm customizable
Wavelength Accuracy	nm	±0.5		
Laser Operation Mode	-	CW		Continuous light
Spectral Linewidth	nm	≤ 0.1		
Side Mode Suppression Ratio	dB	≥ 50		
Output Power	dBm	30/33/37/40/41/43		
Accuracy Working	-	10~100%		
Instability(15min.in)	dB	≤ ±0.02		Equivalent to ≤±0.5%
Instability(8 hr)	dB	≤ ±0.05		Equivalent to ≤±1.2%
Polarization State	-	Random	Linear polarization	
Optical Fiber	-	SMF-28	PM1550	
Fiber connector	-	FC/APC	FC/APC (slow axis alignment)	

Specifications

General Parameters	Desktop	Module (Power 1/2W)	Module (Power 5/10W)
Control Function	Keystroke / RS232 serial Communication	RS232 serial Communication	RS232 serial Communication
Remote control Port	DB9 Female	DB9 Female	DB9 Female
Power Supply	AC100~240V, <150W	DC12V3A, ≤36W	DC12V6A, ≤ 80W
Dimensions	300(W)×320(D)×120(H)mm	125(W)×150(D)×31.5(H)mm	139(W)×235(D)×70(H)mm
Operation Temperature	-5~+35°C		
Operation Humidity	0~70%		

Ordering Information/Product Code				
Series	**Wavelength (nm)**	**Output Power (mW)**	**Fiber**	**Packaging**
STFLH	1550	30/33/37/40/41/43	SM = SMF-28	M - Module
			PM = PM1550	B - Desktop

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